

SURREBUTTAL TESTIMONY AND EXHIBITS OF
MICHAEL L. SEAMAN-HUYNH
ON BEHALF OF
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
DOCKET NO. 2018-319-E
IN RE: APPLICATION OF DUKE ENERGY CAROLINAS, LLC
FOR ADJUSTMENTS IN ELECTRIC RATE SCHEDULES AND TARIFFS AND
REQUEST FOR AN ACCOUNTING ORDER

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Michael Seaman-Huynh. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as a Senior Regulatory Manager in the Utility Rates and Services Division of the Office of Regulatory Staff (“ORS”).

Q. DID YOU FILE DIRECT TESTIMONY AND EXHIBITS IN THIS PROCEEDING?

A. Yes. I filed direct testimony and five (5) exhibits with the Public Service Commission of South Carolina (“Commission”) on February 26, 2019. I also filed supplemental testimony and four (4) exhibits on March 6, 2019.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my surrebuttal testimony is to respond to certain portions of rebuttal testimony of Duke Energy Carolinas, LLC (“DEC” or the “Company”) witnesses Michael Pirro, Julius Wright, and Jon Kerin. My surrebuttal testimony provides an update to ORS’s

recommendations regarding revenue requirement distribution, rate design, proposed Excess Deferred Income Tax Rider (“EDIT Rider”), and impacts to customers’ bills based on the Surrebuttal Testimony and Exhibits of ORS witness Gaby Smith.

Q. PLEASE DESCRIBE THE COMPANY’S REBUTTAL POSITION ON GRADUALISM IN RATE DESIGN.

A. Company witness Pirro acknowledges that the Company believes there is merit to incorporating the principle of gradualism in designing its rates and tariffs. He further offers a possible alternative to the Company’s original proposal of increasing the Residential Basic Facility Charge (“BFC”) from \$8.29 per month to \$28.00 per month. He states that “A possible approach to phasing in the correction was offered by the Company in its recent North Carolina rate case where the increase in the Basic Facilities Charge rate was set equal to 50% of the difference between the current rate and the cost basis. Adopting this approach would reduce the proposed Basic Facilities Charge to \$18.15.”¹

Q. DOES ORS AGREE WITH THE “ALTERNATIVE” AS ADDRESSED BY COMPANY WITNESS PIRRO?

A. No. Under the “alternative” discussed by Company witness Pirro, residential customers would still see a 119% increase in their monthly BFC. Although the Company’s newly proposed alternative yields a slightly better result compared to the original proposal in the Company’s Application, this alternative is deaf to the hundreds of customers’ testimony provided to the Commission in three (3) separate night hearings and hundreds of protestant letters filed with the Commission. The Company’s “alternative” does not go far enough to address the rate design concerns voiced by intervenors and customers.

¹ Company witness Pirro’s Rebuttal Testimony, page 10.

Q. PLEASE EXPLAIN THE CORE PRINCIPLES THAT GUIDE UTILITY RATE DESIGN.

A. In developing electric rates, both utilities and utility commissions, including this Commission, have relied upon ten (10) rate design principles from Dr. James C. Bonbright (“Bonbright Principles”). These principles are:

“Revenue-related Attributes:

1. Effectiveness in yielding total revenue requirements under the fair-return standard without any socially undesirable expansion of the rate base or socially undesirable level of product quality and safety.
2. Revenue stability and predictability, with a minimum of unexpected changes seriously adverse to utility companies.
3. Stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers and with a sense of historical continuity. (Compare “The best tax is an old tax.”)

Cost-related Attributes:

4. Static efficiency of the rate classes and rate blocks in discouraging wasteful use of service while promoting all justified types and amounts of use:
 - a. In the control of the total amounts of service supplied by the company,
 - b. In the control of the relative uses of alternative types of service by ratepayers (on-peak versus off-peak service or higher quality versus lower quality service).
5. Reflection of all of the present and future private and social costs and benefits occasioned by a service’s provision (i.e., all internalities and externalities).
6. Fairness of the specific rates in the apportionment of the total costs of service among the different ratepayers so as to avoid arbitrariness and capriciousness and to attain equity in three dimensions: (1) *horizontal* (i.e., equals treated equally); (2) *vertical* (i.e., unequals treated unequally); and (3) *anonymous* (i.e., no ratepayer’s demands can be diverted away uneconomically from an incumbent by a potential entrant).
7. Avoidance of undue discrimination in rate relationships so as to be, if possible, compensatory (i.e., subsidy free with no intercustomer burdens).
8. Dynamic efficiency in promoting innovation and responding economically to changing demand and supply patterns.

Practical-related Attributes:

9. The related, practical attributes of simplicity, certainty, convenience of payment, economy in collection, understandability, public acceptability, and feasibility of application.
10. Freedom from controversies as to proper interpretation.”²

² See James C. Bonbright, Albert L. Danielsen and David R. Kamerschen, “Principles of Public Utility Rates, 2nd Edition”, Public Utilities Reports (March, 1988)

Q. DOES THE COMPANY'S ALTERNATIVE RATE DESIGN ACHIEVE THE CORE BONBRIGHT PRINCIPLES?

A. The Company's proposal in the Application and the "alternative" discussed by Company witness Pirro do address some of the Bonbright Principles, it falls far short in attributes 3, 4, 8, and 9. The Company's alternative rate design proposal does not have customer or intervenor support. The lack of public acceptability and drastic change in relation to the Company's historical rates fail to meet attributes #3 and #9 of the Bonbright Principles. The shifting of most costs to the fixed monthly BFC, and away from energy and demand charges, does not promote conservation (Bonbright Principle #4) and fails to promote new innovation and economic changes in demand and supply patterns (Bonbright Principle #8).

Q. DO YOU HAVE ANY ADDITIONAL REMARKS REGARDING THE COMPANY'S ALTERNATIVE PROPOSAL?

A. Yes. I would point out that the "alternative" discussed by Company witness Pirro is based on the Company's initial approach in Docket E-7, Sub 1146 in its North Carolina application. In that docket, the Company requested fifty percent (50%) of what the Company thought they were entitled to in North Carolina.³ However, in South Carolina, the Company requested 100% of the BFC increase in this proceeding. Company witness Pirro mischaracterizes the final order from the North Carolina Utility Commission ("NCUC") when he states on page 10 of his rebuttal "[w]here the increase in the Base Facilities Charge rate was set equal to 50% of the difference between the current rate and

³ Company witness Pirro's Direct Testimony in Docket E-7, Sub 1146, page 13.

cost basis.” The final order from the NCUC approved an increase of the residential BFC to \$14.00 per month⁴ which was not proposed by the Company.

Q. COMPANY WITNESS PIRRO TESTIFIES THAT THE COMPANY’S PROPOSAL REGARDING THE BFCS IS INTENDED TO ELIMINATE CROSS-SUBSIDIZATION BETWEEN CUSTOMERS.^{5,6} DO YOU HAVE ANY REMARKS REGARDING THIS?

A. Yes. Company witness Pirro does not discuss how it will shift risk away from the Company and on to customers. By raising the fixed monthly BFC, the Company’s proposal will guarantee a larger stream of revenue from its customers, even in the mild spring and fall months when customer usage is low. This issue of risk shift is discussed in the Surrebuttal Testimony of ORS witness Dr. Ruoff.

Q. WHAT IS ORS’S RECOMMENDATION REGARDING THE COMPANY’S RESIDENTIAL AND SMALL GENERAL SERVICE (“SGS”) BFCS?

A. ORS recommendation that DEC be allowed to increase the BFCs for the residential, both time-of-use (“TOU”) and non-TOU, and SGS customers to recover up to twenty-five percent (25%) of the approved revenue increase assigned to those classes.

Q. IS IT ORS’S RECOMMENDATION THAT SOUTH CAROLINA CUSTOMERS SHOULD NOT BE REQUIRED TO PAY FOR COSTS ASSOCIATED WITH COAL ASH REMEDIATION AND DISPOSAL ACTIVITIES AT THE COMPANY’S NORTH CAROLINA COAL PLANTS?

⁴ <https://starw1.ncuc.net/NCUC/ViewFile.aspx?Id=80a5a760-f3e8-4c9a-a7a6-282d791f3f23>

⁵ Company witness Pirro’s Direct Testimony, page 10.

⁶ Company witness Pirro’s Rebuttal Testimony, page 4.

1 A. No. ORS recommends that South Carolina customers be held harmless for the
2 incremental cost differences attributed to North Carolina state laws. This is discussed in
3 the Direct and Surrebuttal Testimony of ORS witness Wittliff.

4 **Q. IS IT ORS'S POSITION THAT NO SHARING OF COSTS BETWEEN DEC'S**
5 **SOUTH CAROLINA AND NORTH CAROLINA CUSTOMERS SHOULD**
6 **OCCUR?**

7 A. No. Company witness Wright has mischaracterized ORS's position in this
8 proceeding. Proper cost of service allocations should continue to be used for determining
9 the costs to serve each jurisdiction. His rebuttal testimony provides examples of costs that
10 were attributed to Federal, not state, requirements, and therefore, Company witness
11 Wright's examples are misleading and should be rejected. Company witness Wright goes
12 on to state that the "Company acknowledges, and I [Company witness Wright] agree, that
13 there are times that direct allocation of costs between jurisdictions is appropriate."⁷

14 **Q. HAS THE COMPANY EXCLUDED COSTS FROM THIS PROCEEDING THAT**
15 **HAVE BEEN INCURRED DUE TO NORTH CAROLINA LAW THAT SHOULD**
16 **NOT BE ALLOCATED TO SOUTH CAROLINA CUSTOMERS?**

17 A. Yes. The Company is not seeking recovery of certain costs that are associated with
18 the provision of drinking water to North Carolina residents.⁸ In addition, the Company has
19 excluded the costs to comply with the North Carolina Clean Smokestacks Act, North
20 Carolina Renewable Portfolio Standards, and the North Carolina Competitive Energy
21 Solutions for NC (HB.589) laws. ORS's recommendations to limit cost recovery for coal

⁷ Company witness Wright's Rebuttal Testimony, page 21.

⁸ Company witness Kerin's Direct Testimony, page 37.

ash is similar to the Company's initiatives to limit cost recovery attributed to North Carolina legislation and programs that only benefit North Carolina customers.

Q. IN HIS REBUTTAL TESTIMONY, COMPANY WITNESS KERIN STATES THAT THIS ISSUE HAS BEEN LITIGATED IN DOCKET NO. E-7, SUB 1146 AND RULED ON BY THE NCUC. DOES THE RULING BY THE NCUC PRECLUDE THIS COMMISSION FROM DETERMINING THE REASONABLENESS OF AND RESPONSIBILITY FOR COAL ASH COSTS RECOVERY THAT IMPACTS SOUTH CAROLINA CUSTOMERS?

A. No. The NCUC's determination of prudence, reasonableness, and allocation do not restrict this Commission from making its own determinations regarding the prudence and cost recovery responsibility for these costs. A decision in another state jurisdiction is not binding on South Carolina. In Order No. 81-840, the Commission recognized that, in matters under its discretion, it is not bound to follow the example of other jurisdictions.⁹ The Commission has long asserted its authority over the South Carolina operations of the Duke Energy, and its predecessors, while recognizing that the NCUC has authority over Duke Energy Progress, LLC's ("DEP") and DEC's North Carolina operations.^{10,11}

Q. PLEASE DISCUSS THE REVENUE REQUIREMENT AND HOW IT IS DISTRIBUTED TO EACH CUSTOMER CLASS.

A. Based on ORS's adjustments and a 9.30% return on equity ("ROE"), as recommended by ORS witness Parcell, ORS recommends a reduction to the Company's proposed revenue increase from \$230,807,000 (as filed in Company witness Smith's

⁹ <https://dms.psc.sc.gov/Attachments/Order/f48ae6bc-b430-1d0f-e6aeed83c8b6b53d> (see pp. 7-8)

¹⁰ <https://dms.psc.sc.gov/Attachments/Order/7d88552b-eb08-d759-a7d786eddd18d7f3> (see pp. 1-2)

¹¹ <https://dms.psc.sc.gov/Attachments/Order/182e5fac-a002-61be-66ae5e6f3674f628> (see p. 8)

Exhibit 1) to \$82,357,000, which equates to an approximate 64% reduction or approximately \$148,450,000, excluding the refund from the EDIT Rider. The revenue increases for ORS's recommendation by customer class and individual rate schedules are reflected in Surrebuttal Exhibit MSH-1. ORS recommends the revenues generated by the billing determinants not exceed the target revenue for each class as proposed in Surrebuttal Exhibit MSH-1.

Surrebuttal Exhibit MSH-1 demonstrates the percent increases proposed by ORS for each customer class. The retail increases by customer class, including ORS's proposed adjustments and the EDIT Rider, are as follows: 2.64% for Residential; -0.12% for General Service; 0.32% for Industrial; and 3.81% for Lighting. The overall total retail increase is 1.22%.

Q. HOW DOES ORS'S DISTRIBUTION OF THE REVENUE REQUIREMENT IMPACT THE RATE OF RETURN BY CUSTOMER CLASS?

A. Surrebuttal Exhibit MSH-2 provides the resulting rate of return by customer class, taking into account ORS's proposed adjustments and excluding the EDIT Rider. In developing Surrebuttal Exhibit MSH-2, ORS attempted to limit cross-subsidization of customer classes by employing a $\pm 10\%$ "band of reasonableness" relative to the overall retail rate of return. ORS's position brings the Residential and Industrial customer classes within this band. The returns by class are as follows: 5.21% for Residential; 6.73% for General Service; 5.84% for Industrial; and 5.11% for Lighting. The overall rate of return for total retail is 5.75%. ORS recommends that any increase by the Commission granted be allocated in a manner such that the returns by class are as equitable as practicable.

Q. WHAT IS THE IMPACT OF THESE UPDATES ON ORS'S RECOMMENDATIONS REGARDING THE COMPANY'S RESIDENTIAL AND SGS BFCS?

A. Incorporating the updates from ORS witness Smith, ORS recommends the BFC be increased to \$11.96 per month for residential non-TOU customers, \$13.09 per month for residential TOU customers, and \$11.70 per month for SGS customers as shown on Surrebuttal Exhibit MSH-3.

Q. HAS ORS UPDATED ITS RECOMMENDATION REGARDING THE COMPANY'S PROPOSED EDIT RIDER?

A. Yes. ORS has updated its calculations of the first-year return of the proposed EDIT Rider based on a 9.30% ROE and 4.53% Cost of Debt, as recommended by ORS witness Parcell in his surrebuttal testimony, to arrive at a total return of EDIT Rider revenue of (\$61,798,979) for the first year. Supplemental Exhibit MSH-4 allocates this total to the various customer classes.

Q. HAS ORS REVIEWED THE IMPACT OF THE COMPANY'S PROPOSED RATES ON THE TYPICAL RESIDENTIAL CUSTOMER'S MONTHLY BILL?

A. Yes. Surrebuttal Exhibit MSH-5 shows the typical monthly residential bill for a customer on Rate RS with 1,000-kilowatt hour ("kWh") consumption for DEC's currently approved rates and the rates proposed in this proceeding. For information purposes, ORS provided the same information for South Carolina Electric & Gas Company ("SCE&G"), DEP, Lockhart Power Company ("Lockhart"), South Carolina Public Service Authority ("Santee Cooper"), and the most recent U.S. Energy Information Administration ("EIA") data for the South Atlantic region of the United States.

Q. AFTER INCORPORATING ORS'S ADJUSTMENTS AND RECOMMENDATIONS INTO THE COMPANY'S APPLICATION, WHAT IS THE NET IMPACT ON THE TYPICAL MONTHLY BILL FOR A TYPICAL RESIDENTIAL CUSTOMER?

A. The monthly bill for the typical residential customer on Rate RS using 1,000 kWh ("Typical Bill") will increase by approximately \$9.05 from \$117.74 to \$126.79, or 7.7%, exclusive of the EDIT Rider. Including the EDIT Rider, the Typical Bill would decrease by (\$4.59) for a net increase of \$4.46. Inclusive of all changes, the Typical Bill would increase from \$117.74 to approximately \$122.20, or 3.8%.

Q. WILL YOU UPDATE YOUR SURREBUTTAL TESTIMONY BASED ON INFORMATION THAT BECOMES AVAILABLE?

A. Yes. ORS fully reserves the right to revise its recommendations via supplemental testimony should new information not previously provided by the Company, or other sources, become available.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

Duke Energy Carolinas, LLC
Proposed Revenues
Docket No. 2018-319-E

SURREBUTTAL
EXHIBIT MSH-1

Rate Class	Present Revenues Annualized (a)	ORS Proposed Revenues Annualized (b)	ORS Proposed Revenue Increase (Decrease) (c)	ORS Percent Increase (Decrease) (d)	ORS EDIT Rider Increase (Decrease) (e)	ORS Proposed Net Revenue Increase/(Decrease) (Total) (f)	ORS Percent Increase (Decrease) (g)
<u>Residential</u>	\$ 680,173,659	\$ 719,730,465	\$ 46,487,000	5.82%	\$ (28,500,001)	\$ 17,986,999	2.64%
<u>General Service</u>	\$ 467,750,879	\$ 488,219,729	\$ 14,410,000	4.38%	\$ (14,958,861)	\$ (548,861)	-0.12%
<u>Industrial</u>	\$ 499,868,420	\$ 518,903,152	\$ 17,453,000	3.81%	\$ (15,829,061)	\$ 1,623,939	0.32%
<u>Lighting</u>	\$ 39,250,614	\$ 42,547,227	\$ 4,007,000	8.40%	\$ (2,511,057)	\$ 1,495,943	3.81%
<i>Total Retail</i>	<i>\$ 1,687,043,572</i>	<i>\$ 1,769,400,573</i>	<i>\$ 82,357,000</i>	<i>4.88%</i>	<i>\$ (61,798,979)</i>	<i>\$ 20,558,021</i>	<i>1.22%</i>

Duke Energy Carolinas, LLC

Rate of Return by Class

Docket No. 2018-319-E
(000's Omitted)

SURREBUTTAL

EXHIBIT MSH-2

	Before Increase				After Proposed Increase			
	Company Pro Forma Ratebase	Company Pro Forma Return	ROR	Relationship to Parity	Company Pro Forma Ratebase	ORS Pro Forma Return	ROR	Relationship to Parity
Residential	\$ 2,536,231	\$ 96,975	3.82%	82%	\$ 2,536,231	\$ 132,022	5.21%	91%
General Service	\$ 1,392,174	\$ 82,840	5.95%	128%	\$ 1,392,174	\$ 93,704	6.73%	117%
Industrial	\$ 1,500,954	\$ 74,450	4.96%	107%	\$ 1,500,954	\$ 87,608	5.84%	102%
Lighting	\$ 190,620	\$ 6,721	3.53%	76%	\$ 190,620	\$ 9,743	5.11%	89%
Total Retail	\$ 5,619,978	\$ 260,986	4.64%	100%	\$ 5,619,978	\$ 323,076	5.75%	100%

Duke Energy Carolinas, LLC
ORS Residential & SGS BFC Recommendations
Docket No. 2018-319-E

SURREBUTTAL
EXHIBIT MSH-3

	Bills	ORS Proposed Revenue Increase/(Decrease)	ORS Proposed Revenue 25% Increase	ORS BFC Increase	Current BFC	ORS Proposed BFC	ORS Percent Increase
Residential (RS)	3,162,644	\$46,442,001	\$11,610,500	\$3.67	\$8.29	\$11.96	44%
Residential (RT)	3,565	\$44,999	\$11,250	\$3.16	\$9.93	\$13.09	32%
SGS	958,490	\$4,540,405	\$1,135,101	\$1.18	\$10.52	\$11.70	11%

Duke Energy Carolinas, LLC
Derivation of EDIT Rider
Docket No. 2018-319-E

SURREBUTTAL
EXHIBIT MSH-4

	Billing Units (kWh)	EDIT Rider Class Total (\$)	EDIT Rider Class Rate (\$/kWh)
Residential	6,206,952,946	\$ (28,500,001)	-\$0.004592
General Service	5,402,677,710	\$ (14,973,590)	-\$0.002772
Industrial	8,950,860,748	\$ (15,820,771)	-\$0.001768
Lighting	225,248,236	\$ (2,504,617)	-\$0.011119
Total Retail	20,785,739,640	\$ (61,798,979)	

Duke Energy Carolinas, LLC
Typical Monthly Residential Bill for 1,000 kWh Consumption
Docket No. 2018-319-E

SURREBUTTAL
EXHIBIT MSH-5

	Total Bill Including EDIT Rider	Total Bill Excluding EDIT Rider
DEC (Schedule RS) (Current)	\$117.74	
DEC (Schedule RS) (Company Proposed)	\$132.48	\$137.13
DEC (Schedule RS) (ORS Proposed)	\$122.20	\$126.79
SCE&G (Rate 8)	\$124.91	
DEP (Schedule RES)	\$122.49	
Lockhart (Schedule R) ¹	\$134.45	
Santee Cooper (Schedule RG) ²	\$123.87	
South Atlantic 2017 Average (from EIA) ³	\$125.15	

¹ Lockhart Rate does not include monthly changes to Schedule O.

² Santee Cooper bill does not include non-public changes to FAC-17, DSC-17, and EDA-17.

³ https://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf